

## REMARKS

Favorable reconsideration and allowance of this application are respectfully requested.

By way of the amendment instructions above, the subject matter of original claim 7 has been incorporated into the amended version of claim 1 and, as such, claim 1 has been cancelled. Hence, claims 1-6 and 8-16 remain pending herein for which favorable reconsideration and allowance are solicited.

The amendment instructions above also clarify the language of the claims and so as to address the Examiner's rejection advanced under 35 USC §112, second paragraph.

Furthermore, regarding the claimed dimer component, applicants note that such a term means a dimer component formed by a reaction of a phenol and an aldehyde. Such a term is, moreover, highly conventional and well known in the art, as can be seen, for example, from the following web page of SUMITOMO BAKELITE CO., LTD.: [www.sumibe.co.jp/english/topics/ar22.html](http://www.sumibe.co.jp/english/topics/ar22.html), as well as from the abstracts of USP 5,132,376 and USP 6,384,103 (copies attached).

The Examiner has also objected to the applicants' use of the term "derivative". With regard to the wording "melamine or derivative thereof", the Examiner will note that such wording has been amended to recite -- an aminotriazine -- in conformity with the specification. With regard to the term "a triazine derivative", however, applicants note that such a term is conventional and well known in this technical field. Moreover, a salt of the triazine derivative with a pyrophosphoric acid or polyphosphoric acid is clearly defined by the specification on page 20, lines 10-11. Thus, applicants suggest that such terms fully comply with the statutory requirements of 35 USC §112 second paragraph.

The only issues remaining to be resolved are the Examiner's rejections advanced under 35 USC §§102(e) and 103(a) based on USP 6,362,269 to Ishihata. As will become evident from the following discussion, Ishihata '269 is inappropriate as a reference against the presently pending claims herein.

Applicants note that Ishihata et al discloses a resin composition which is asserted to have superior wet heat fatigue and impact properties (see column 1, lines 5-10 thereof). Specifically, Ishihata et al discloses a resin composition composed substantially of:

- (1) 100 parts by weight of a resin component selected from:
  - (a) an aromatic polycarbonate resin (A-i component) obtained by melt polymerization and having a relative fluorescence intensity of  $4 \times 10^3$  or less,
  - (b) a resin mixture composed of 10-90 parts by weight of A-i component and 90-10 parts by weight of a styrene-based resin (A-2 component), or
  - (c) a resin mixture composed of 10-90 parts by weight of A-i component and 90-10 parts by weight of an aromatic polyester resin (A-3 component), and

(2) 5 to 200 parts byweight of at least one kind of reinforcing filler selected from the group consisting of a fibrous filler (B-i) and a platy filler (B-2) (claim 1) (resin composition-I). Moreover, Ishihata et al also discloses a resin composition composed substantially of (a) 10-90 parts by weight of the A-1 component and (b) 90-10 parts by weight of the A-2 component or the A-3 component (claim 14) (resin composition-II).

The A-3 component may be at least one kind of resin selected from the group consisting of a polyethylene terephthalate, a polyethylene naphthalate, a polybutyrene terephthalate and a polybutyrene naphthelate (claim 6 or 19).

The resin composition-I and resin composition-II can be resin additives which are added for such purposes as a heat stabilizer, a release agent, a light stabilizer, an antistatic agent, a flame retardant and the like (column 21, lines 5-9). As a heat

stabilizer, phosphites, phosphates and phosphonites are exemplified (column 21, lines 13-54). As a flame retardant, there may be exemplified halogenated bisphenol A polycarbonate type, organic salt type, aromatic phosphoric acid ester type, and halogenated aromatic phosphoric acid ester type flame retardants (column 23, lines 12-11), red phosphorus microencapsulated with a melamine-formalin type resin and the like (column 24, lines 12-25), a phosphazene type flame retardant represented by a phenoxyphosphazene oligomer and a cyclic phenoxyphosphazene oligomer (column 26, lines 4-7).

Ishihata et al also discloses the following information at column 26, lines 21-29. In this regard, Ishihata et al disclose that, to the resin composition can also be added small amounts of another resin, such as polyaznide resin, polyurethane resin, poly(phenylene ether) resin, polyolefin resin (e.g., polyethylene or polypropylene), polymethacrylate resin, phenolic resin and epoxy resin, or an elastomer such as isobutylene rubber, isoprene rubber and silicone rubber.

The Examples of Ishihata et al demonstrate superior wet heat fatigue, impact resistance of flat, impact strength, weld strength, chemical resistance, or the like as compared with the compositions in the Comparative Examples.

In contrast to the present invention, Ishihata et al fails to disclose or suggest the combination of the phenolic resin with the phosphazene compound in the specific ratio as defined in the applicants' pending claims. Thus, the present invention is novel over Ishihata et al for at least this reason.

Moreover, Ishihata et al is also silent with regard to the important role of the above combination for the purpose of flame retardation. Particularly, Ishihata et al discloses a phenolic resin *only* as one possible "other resin" which can be added to the basic resin composition. In addition, the phenolic resin is disclosed at the same level as a low flame-retardant resin such as polyolefin and polymethacrylate. Thus, Ishihata et al does not disclose or suggest anything about the functions or roles of the phenolic resin in combination with the phosphazene compound as defined in the present

applicants' claims. Therefore, the specific combination of the phenolic resin with the phosphazene compound generally, in addition to the particular ratio thereof, for the purpose of flame retardation could not reasonably be discerned by an ordinarily skilled person from Ishihata et al. As such, Ishihata et al does not render "obvious" the present invention.

Such "unobviousness" is further evidenced by the unexpected results that ensue by virtue of the combination of the phenolic resin and a phosphazene compound as claimed. That is, the present applicants have discovered that particular flame retardant advantages ensue when the phenolic resin and phosphazene compound are combined in the specific amounts claimed. Thus, since Ishihata fails to disclose or suggest the important role of the above combination, it cannot be predicted at all from Ishihata et al that any advantages would, or could, be obtained when the phenolic resin is combined with the phosphazene compound in a specific ratio as claimed.

In contrast, according to the present invention, the specific combination of claimed components in the amounts specified remarkably improves flame retardancy of the resin composition. Such results are evidenced by the Examples of the present specification. Specifically, the Examiner is asked to compare Examples 1-15 with the Comparative Examples 2-11 which lack either the phenolic resin or the phosphazene compound. As shown by the data therein, flame retardancy is remarkably improved by the Examples (V-1 or V-0) in comparison with the Comparative Examples (below HB). Such results would never be predicted from the disclosure of Ishihata et al as discussed previously.

Applicants also note that the effective date of Ishihata et al for purpose of 35 USC §102(e) is only June 7, 2000, whereas the subject application is entitled to an earlier filing date of December 27, 1999 by virtue of its Japanese priority application 371173/1999. To evidence the applicants' entitlement to such earlier priority date, there is attached hereto a certified English-language translation of such Japanese priority application. As such, Ishihata et al is inappropriate as a reference against the present application for this reason also.

Every effort has been made to advance prosecution of this application to allowance. Therefore, in view of the amendments, remarks and attachments presented herewith, applicants suggest that prompt allowance of this application is in order and Official Notice to that effect is solicited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_



Bryan H. Davidson  
Reg. No. 30,251

BHD:fmh  
1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100